UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,001	03/13/2007	Ralph Gronau	AP 10814	4514
	7590		EXAMINER	
ONE CONTINI	ENTAL DRIVE		DAGER, JONATHAN M	
AUBURN HILLLS, MI 48326-1581			ART UNIT	PAPER NUMBER
			3663	
			MAIL DATE	DELIVERY MODE
			06/30/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/579,001	GRONAU ET AL.			
Office Action Summary	Examiner	Art Unit			
	JONATHAN M. DAGER	3663			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I.  nely filed  the mailing date of this communication.  D (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on 11 Ma     This action is FINAL. 2b)☑ This     Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4)  Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) 1-10 is/are withdrawn 5)  Claim(s) is/are allowed. 6)  Claim(s) 11-20 is/are rejected. 7)  Claim(s) 18 is/are objected to. 8)  Claim(s) are subject to restriction and/or Application Papers  9)  The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the consequence of	r election requirement.  r. epted or b) □ objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is objected to by the legan is required if the drawing(s) is objected to by the legan is required if the drawing(s) is objected to by the legan is required if the drawing(s) is objected to by the legan is required if the drawing(s) is objected to by the legan is required if the drawing(s) is objected to by the legan is required if the drawing(s) is objected to by the legan in the legan is required if the drawing(s) is objected to by the legan is required if the drawing(s) is objected to by the legan is required if the drawing(s) is objected to by the legan is required if the drawing(s) is objected to by the legan is required in th	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
<ul> <li>Priority under 35 U.S.C. § 119</li> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) ☑ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 11 May 2006.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	nte			

#### DETAILED ACTION

### Remarks

The prior Office Action (issued 11 March 2009) was incorrect in that original claims 1-10 were examined, and not the amended claim listing filed. Thus, the previous non-final Office Action is hereby vacated, and the amended claim listing (claims 11-20) will now be examined.

# Claim Objections

Claim 18 is objected to because of the following informalities: grammatical error.

Claim 18 recites that "... the vehicle is automatically accelerated or deceleration or slowed down..." The Examiner believes that the language should read: "...the vehicle is automatically accelerated or decelerated or slowed down ..."

Appropriate correction is required.

## Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 13, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Application/Control Number: 10/579,001 Page 3

Art Unit: 3663

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Price (US

6,076,036).

Regarding claims 11-13, as best understood, Price has disclosed an automatic control of speed for a vehicle is based on using speed setting, actual speed, acceleration and the change of the slope of the road to set fuel flow for improved fuel mileage. The proposed system of sensors and a programmed computer automatically manages fuel flow to the engine as the truck moves in gusting winds and through transitions from one slope of the road to another. As the conventional cruise control operates to maintain or change speed according to a speed setting Vs the actual speed, the added control of this invention results in a modification of the signal to fuel flow depending upon what road slope change and acceleration is detected. The result is an improvement in fuel mileage (abstract)

Thus, Price clearly discloses a cruise control adaptation, the method comprising determining a request from a driver for a uniform vehicle speed, and after identifying the request for uniform vehicle speed, at least partly controlling modifications to the vehicle speed, which are not initiated by the driver, in order to obtain a lowest possible fuel consumption for the driving engine of the vehicle.

Application/Control Number: 10/579,001 Page 4

Art Unit: 3663

## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price, as applied to claims 11-13 above, and further in view of Moncelle (US 4,914,597).

Regarding claims 14-17, Price does not explicitly disclose that the driver's manipulation of the accelerator pedal in a given time frame (1 to 8 seconds) sets the cruise control.

Moncelle teaches that the speed of the vehicle 38 may be varied by an accelerator or throttle pedal 40 which is controlled by an operator of the vehicle 38. The accelerator or throttle pedal 40 develops a signal on a line 42 which is coupled to a road speed limit and cruise control 44. The control 44 also receives inputs from a speed sensor 46 which detects the ground speed in miles per hour of the vehicle 38 as well as inputs from three switches 48, 50 and 51, a brake pedal 52 and a clutch pedal 54. When the switch 48 is closed, a signal is passed to the road speed limit and cruise control 44 to engage the cruise control mode of operation. When the switch 50 is momentarily closed, the current speed of the vehicle as detected by the speed sensor 46 is stored in a memory 56 within the control 44. This speed comprises a speed command or set speed when operating in the cruise control mode. If this switch 50 is closed for longer than a predetermined time, for example one second, the set speed is increased with time until the switch 50 is closed. The switch 51, when momentarily closed, commands the control 44 to resume cruise control operation at the set speed which is stored in the memory 56 of the control 44. If the switch 51 is

Art Unit: 3663

closed for longer than the predetermined time, the set speed is decreased with time until this switch is opened (column 4 lines 20-44).

The base invention of Price is deficient, with respect to claims 14-17, in that it is not explicitly disclosed the cruise control features as embodied by said claims. Moncelle cures this deficiency by teaching that the user can set the desired cruise control speed by maintaining the accelerator position at a constant level for 1 second, as well as further teaching storing the driver demand value.

Thus, since both inventions both disclose/teach similar elements and usage, it would have been obvious to one of ordinary skill in the art at the time of the invention to simply substitute one apparatus into the other, or at least combine their respective elements, to achieve no more than the predictable result of a utilizing driver acceleration request to set the vehicle cruise control.

Combining prior art elements according to known methods to yield predictable results is a rationale to support a conclusion of obviousness. See MPEP 2143(A).

Simple substitution of one known element for another to obtain predictable results will support a conclusion of obviousness. See MPEP 2143 (B).

Regarding claims 18 and 19, Price discloses that as the conventional cruise control operates to maintain or change speed according to a speed setting Vs the actual speed, the added control of this invention results in a modification of the signal to fuel flow depending upon what

Art Unit: 3663

road slope change and acceleration is detected. The result is an improvement in fuel mileage (abstract).

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Price and Moncelle, as applied to claims 14-19 above, and further in view of Lanyi (US 6,485,341).

Regarding claim 20, Price and Moncelle, as combined above, does not explicitly teach wherein the vehicle speed is automatically corrected when the current speed deviates 0.2 km/h-2km/h from the target speed.

Lanyi, however, teaches that Known cruise control systems typically provide a method of regulating the speed of a vehicle to a target speed without concern with the average speed of the vehicle over a preselected time or distance. For example, if a target speed of 50 miles per hour MPH) is set for a vehicle, known cruise control algorithms react to a deviation from the target speed by regulating the vehicle speed back to the target speed. In other words, if the cruise control algorithm detects that the vehicle actually is traveling at 49 miles per hour, when the target speed is 50 miles per hour, the algorithm will take steps to increase the speed of the vehicle to 50 miles per hour. Regardless of the specific methodology employed to accomplish this task, known cruise control systems attempt to reestablish the target speed when a deviation in speed is sensed (column 3 lines 24-39).

Thus, Lanyi teaches that if the speed deviates 1 mph (or 1.609 km/h), known systems will react to correct the speed deviation.

Art Unit: 3663

All of the components and methods are known in the above prior art. The only difference is a combination of these elements into a single device.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the known cruise control parameters onto the combination of Price and Moncelle, since all systems could be used in combination to produce the predictable result of automatically correcting the speed of a vehicle in a desired speed deviation range

Combining prior art elements according to known methods to yield predictable results is a rationale to support a conclusion of obviousness. See MPEP 2143(A).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN M. DAGER whose telephone number is (571)270-1332. The examiner can normally be reached on 0830-1800 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/579,001

Page 8

Art Unit: 3663

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD

23 June 2009

/Jack W. Keith/ Supervisory Patent Examiner, Art Unit 3663